

elastic deformation in a cutting tool?

- A) Ductility
B) Malleability
C) Hardness (Correct)
D) Toughness

18. Which property of metal has its power of returning to its original shape after the applied force is released?

- A) Malleability
B) Tenacity
C) Elasticity (Correct)
D) Plasticity

19. Which cast iron cannot be welded?

- A) Grey cast iron
B) **White cast iron (Correct)**
C) Malleable cast iron
D) Nodular cast iron

20. Which metal cannot be forged?

- A) Alloy steel
B) Mild steel
C) Steel
D) Cast iron (Correct)

21. Which metal is widely used for making casting of machinery parts?

- A) Grey cast iron (Correct)**
B) White cast iron
C) Malleable cast iron
D) Wrought iron

22. Which furnace is used to get pig iron from iron ore?

- A) Mild steel - Rever battery
B) Electric furnace
C) Blast furnace (Correct)
D) Cupola

23. What is the name of furnace to obtained cast iron?

- A) Cupola (Correct)**
B) Mild steel - Blast furnace
C) Steel - Rever battery
D) Alloy metal - Electric furnace

24. What is the other name of low carbon steel?

- A) Low alloy steel
B) High alloy steel
C) High speed steel
D) Mild steel (Correct)

25. What is the carbon percentage in high carbon steel?

- A) 0.02% to 0.03%
B) 0.15% to 0.25%
C) 0.25% to 0.50%
D) 0.50% to 1.50% (Correct)

26. What is the ore of aluminium?

- A) Hematite
B) Mallatite (Incorrect)
C) Bauxite
D) Lemonite

27. Which property of a metal enables it by which it can be drawn out into wires under tension without rupture?

- A) Ductility (Correct)**
B) Malleability
C) Hardness
D) Brittleness

28. What is the area of a rectangle, whose length and breadth are 10cm and 8cm respectively?

- A) 75 cm^2
B) **80 cm^2 (Correct)**
C) 85 cm^2
D) 90 cm^2

29. What is the primeter of scalene. Triangle having sides of 40mm, 20mm and 28mm?

- A) 68 mm
B) 78 mm
C) 88 mm (Correct)
D) 98 mm

30. What is the cross sectional area of a circular ring of D = 38 mm d = 32mm?

- A) 320 mm^2
B) **330 mm^2 (Correct)**
C) 340 mm^2
D) 350 mm^2

31. What is the area of an ellipse if the major and minor axes are 5 cm and 3 cm respectively?

- A) 27 cm^2
B) 37 cm^2
C) 47 cm^2 (Correct)
D) 57 cm^2

32. What is the capacity of a conical tank of radius 2 m and height 5m?

- A) 11 m^3
B) **21 m^3 (Correct)**
C) 31 m^3
D) 41 m^3

33. What is the formula for velocity?

- A) Distance covered/Time
B) **Displacement/Time (Correct)**
C) Change in velocity/Time
D) Change of momentum/Time

34. What is called if a body posses only magnitude or size alone?

- A) Speed
B) Velocity
C) Vector quantity
D) Scalar quantity (Correct)

35. What is called if a body posses both magnitude and direction of velocity?

- A) Speed
B) Velocity
C) Vector quantity (Correct)
D) Scalar quantity

36. What is the rate of change of displacement of a body?

- A) Body at rest
B) Body at motion
C) Speed
D) Velocity (Correct)

37. What is called if a body changes its position with respect to its surroundings?

- A) Body at rest
C) Speed
- B) Body at motion (Correct)**
D) Velocity

38. What is velocity of a body travels a distance of 168 metres in a line in 21 seconds?

- A) 6 m/sec
C) 10 m/sec
- B) 8 m/sec (Correct)**
D) 12 m/sec

39. What is the formula for acceleration?

- A) Metre/second (Incorrect)
C) Metre/minute
- B) Metre/second² (Correct)**
D) Metre/hour

40. How many newtons for 1 kilogram?

- A) 981 Newtons
C) 9.81 Newtons
- B) 98.1 Newtons (Incorrect)
D) 0.981 Newtons

41. How many watts for 1 horse power in British system?

- A) 726 watts
C) 746 watts (Correct)
- B) 736 watts
D) 756 watts

42. How much work done in one hour, if a pump can raise 100 liters of water through a height of 200 meters in one minutes?

- A) 12 x 104 kg meter
C) 12 x 106 kg meter
- B) 12 x 105 kg meter (Correct)**
D) 12 x 107 kg meter

43. What is the potential energy, if a body of mass 250 kg is at a height of 30 metre?

- A) 72.57 KJ
C) 74.57 KJ
- B) 73.57 KJ (Correct)**
D) 75.57 KJ

44. What is the work done in joules if a load of 15.5 kg is lifted through a height of 4.4 metres?

- A) 639 Joules
C) 659 Joules
- B) 649 Joules (Incorrect)
D) 669 Joules

45. What is the kinetic energy of a bullet of mass 5gm travels with a speed of 500 m/sec?

- A) 620 Joules
C) 630 Joules
- B) 625 Joules (Correct)**
D) 635 Joules

46. What is the square root of 0.017?

- A) 0.001
C) 0.00001
- B) 0.13 (Correct)**
D) 0.00001

47. How much is 8% of 40 kg?

- A) 2.2 kg
C) 4.2 kg
- B) 3.2 kg (Correct)**
D) 5.2 kg

48. What is the percentage of copper if the casting weight of copper 42.3 kg and tin weight 2.7 kg?

- A) Cu 92%
C) Cu 96%
- B) Cu 94% (Correct)**
D) Cu 98%

49. What is the LCM of 12, 18, 6, 36?

- A) 12
C) 36 (Correct)
- B) 18
D) 42

50. What is the square root of 529?

- A) 12
C) 33
- B) 23 (Correct)**
D) 43